Does Your Word Processor Talk?

A Look at Ways to Support UDL Strategies

Presented by:

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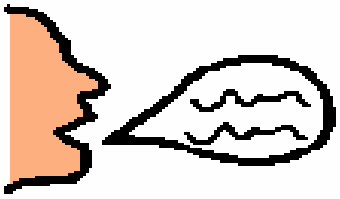
TEXT TO SPEECH



Why Text-to-Speech?

- Motivates children
- Reads their writing back to them
- Provides immediate feedback
- Helps them to hear whether their writing makes sense
- Gives them confirmation of each word and/or sentence
- Provides a visual cue when used with highlight function
- Increases chances for success
- Provides reading support for writings of others

Text-to-Speech software (e.g. Writing with Symbols, Read & Write) is used to convert words from a computer document (e.g. word processor document, web page) into audible speech spoken through the computer speaker. This would be helpful to people who need or want an oral verification of what they are seeing in print.

> *"I couldn't read. I just scraped by. My solution back then was to read classic comic books because I could figure them out from the context of the pictures. Now I listen to books on tape."*
>
> --Charles Schwabb, Learning Disabled

The following list features tools that can help people who have difficulty with writing and reading activities. These products are only a few of the many assistive technology solutions available for people with learning, language or physical access problems.

Microsoft Narrator

Narrator is a text-to-speech utility for people who are blind or have low vision. Narrator reads what is displayed on the screen—the contents of the active window, menu options, or text that has been typed.

Narrator is designed to work with Notepad, WordPad, Control Panel programs, Internet Explorer, the Windows desktop, and some parts of Windows Setup. Narrator may not read words aloud correctly in other programs. Narrator has a number of options that allow you to customize the way screen elements are read. You can:

- Have new windows, menus, or shortcut menus read aloud when they are displayed.
- Have typed characters read aloud.
- Have the mouse pointer follow the active item on the screen.
- Adjust the speed, volume or pitch of the voice.

The accessibility tools that ship with Windows are intended to provide a minimum level of functionality for users with special needs. Most users with disabilities will need utility programs with more advanced functionality for daily use.

Notes:

- An easy way to start Narrator is to press the Windows logo key ⊞ + U. Narrator is set to start by default when Utility Manager starts. However, Narrator may not start if your computer does not have text-to-speech program capability.
- You can start Accessibility programs before logging on to the computer by pressing the Windows logo key ⊞ + U at the Welcome to Windows dialog box that appears when Windows starts.
- Narrator is not available for all languages and is only supported on the English version of Windows XP.
- To read any window again, press CTRL+SHIFT+SPACEBAR. For more shortcuts, see Windows Help.

Turn On and Use Narrator

- On the **Start** menu:
- Point to **All Programs**.
- Point to **Accessories**.
- Point to **Accessibility**.
- Select **Narrator**.

Narrator Can be Set to:

- Announce Events on the Screen
- Read typed characters
- Move mouse pointer to the active item
- Start Narrator minimized

Adjusting Speech Options

- Using the **Speech** icon in Control Panel, you can control the voice properties, speed, and other options for text-to-speech (TTS) translation. For example, you can choose text-to-speech voices, the rate of speech for text-to-speech playback, and select a preferred audio device as output for text-to-speech playback.

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Accessibility

Accessibility Enhancements

Windows XP includes a wide array of options to increase visibility of items on the computer screen. Options that can be adjusted include:

- Font style, color, and size of items on the desktop—using the Display options, choose font color, size and style combinations.
- Icon size—make icons larger for visibility, or smaller for increased screen space.
- Screen resolution—change pixel count to enlarge objects on screen.
- High contrast schemes—select color combinations that are easier to see.
- Cursor width and blink rate—make the cursor easier to locate, or eliminate the distraction of its blinking.
- Microsoft Magnifier—enlarge portion of screen for better visibility.

Sounds and Speech

Windows XP includes options to make computer sounds easier to hear or distinguish—or, visual alternatives to sound. A variety of speech-to-text options are also available. Options you can adjust include:

- Sound Volume—turn computer sound up or down.
- Sound Schemes—associate computer sounds with particular system events.
- ShowSounds—display captions for speech and sounds.
- SoundSentry—display visual warnings for system sounds.
- **Notification**—Get sound or visual cues when accessibility features are turned on or off.
- Text-to-Speech—Hear window command options and text read aloud.

Keyboard and Mouse

In Windows XP you can choose a number of options to make your keyboard and mouse faster and easier to use. Options you can adjust include:

Mouse Options:

- Double-Click Speed—choose how fast to click the mouse button to make a selection.
- ClickLock—highlight or drag without holding down the mouse button.
- Pointer Speed—set how fast the mouse pointer moves on screen.
- SnapTo—move the pointer to the default button in a dialog box.
- Cursor Blink Rate—choose how fast the cursor blinks—or, if it blinks at all.
- Pointer Trails—follow the pointer motion on screen.
- Hide Pointer While Typing—keep pointer from hiding text while typing.
- Show Location of Pointer—quickly reveal the pointer on screen.
- Reverse the function of the right and left mouse buttons—reverse actions controlled by the right and left mouse buttons.
- Pointer schemes—choose size and color options for better visibility.

Keyboard Options:

- StickyKeys—allow pressing one key at a time (rather than simultaneously) for key combinations.
- FilterKeys—ignore brief or repeated keystrokes and slow down the repeat rate.
- ToggleKeys—hear tones when pressing certain keys.
- MouseKeys—move the mouse pointer using the numerical keypad.
- Extra Keyboard Help—get ToolTips and additional keyboard help.
- Character Repeat Rate—set how quickly a character repeats when a key is struck.
- Dvorak Keyboard Layout—alternative keyboard layouts available for individuals who type with one hand or finger.

Accessibility Wizard and Utilities

The Accessibility Wizard can help new users quickly and easily customize various accessibility options that address visual, hearing, and dexterity needs all in one place. The Accessibility Wizard can be run again at any time to make changes, or changes can be made to individual settings through Control Panel. Accessibility Utilities provide temporary accessibility support.

Accessibility Utilities include:

- Magnifier—a display utility that makes the computer screen more readable by creating a separate window that displays a magnified portion of the screen.
- Narrator—a text-to-speech utility that reads what is displayed on the screen—the contents of the active window, menu options, or text that has been typed.
- On-Screen Keyboard—displays a virtual keyboard on the computer screen that allows people to type using a pointing device or joystick.
- Utility Manager—enables administrator-level users to check an accessibility program's status and start or stop an accessibility utility.

Note to Assistive Technology Product Users

If you use assistive technology products, be sure to contact your assistive technology manufacturer www.microsoft.com/enable/at/ to check compatibility with Windows XP and to learn how to adjust your settings to optimize compatibility.

Accessibility Resources for Windows XP

Windows XP Accessibility Resources

www.microsoft.com/enable/products/windowsxp/

Step by Step Tutorials for Accessibility Features

www.microsoft.com/enable/training/windowsxp/

Keyboard Assistance

www.microsoft.com/enable/products/keyboard.aspx

Writing With Symbols

Writing with Symbols is a talking symbol/word processing program that displays symbols and other graphics for each word that you type.

Using Speech

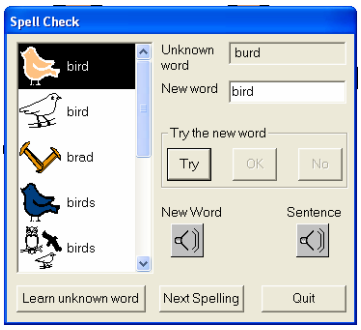
- The speech feature is preset to be on when the program launches. If it is not on, select *Turn Speech On* in the **SPEECH** menu.

- To select how the program speaks the text, click the **SPEECH** menu and select one or more of the following:
  - *Speak after Letter*
  - *Speak after Word*
  - *Speak after Sentence*

- To select if the program highlights the spoken words, click the **SPEECH** menu and select *Show Highlighter*.

- To alter the speech settings for a document, click the **SPEECH** menu and select *Speech Setup* or to change the pronunciation of a work, select *Pronunciation*.

Using Spell Checker



- Suggested words in the spell checker speak and are accompanied by a picture (when one is available).

Hearing Spelling Errors

- An audible tone warns of any spelling errors.

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Read & Write 7.0 Gold

Speech Features

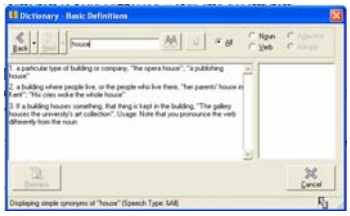
- ***Spell Checker***

  - Has advanced phonetic spell checker to reduce the number of spelling errors that are made by users.
  - Use speech function to read suggested words and description.

- ***Word Prediction***

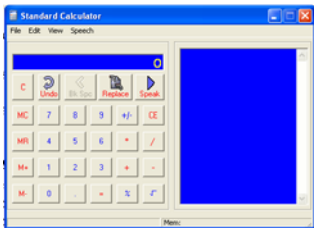
  - Click on the word in the list to hear it or choose the *Speech Options* from the *Prediction Options* and have the program speak the word list.
  - If the word is a homophone, the description will be read.
  - If the description of the word is needed, click on the dictionary icon next to the word.

- ***Dictionary***



  - Gives description of word and also speaks alternate word choices.
  - To read description, click on description and press the play button on the Read & Write toolbar.

- ***Calculator***



  - **Speech Options**
    - Speak on Mouse Over
    - Speak on Click
    - Audible Button Click
    - No Sound on Click

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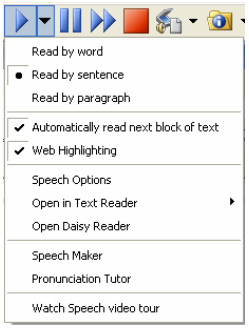
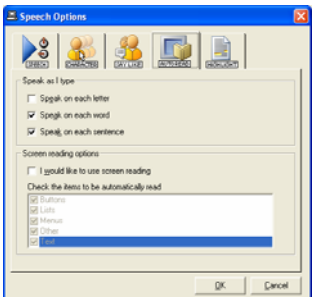
- ***Play Features***

  - **Reading Text Using The Toolbar**



    - Click on the drop down list, and select:
      - *Read by word*
      - *Read by sentence*
      - *Read by paragraph*
    - Select the *Automatically Read Next Block Of Text* option from this menu to automatically read the next word, sentence or paragraph.
    - To make the program read, click on the word, sentence, or paragraph, and then click on the button.

  - **Read Text As You Type**



    - Click on the drop down list, and select *Speech Options*.
    - Click on the AutoRead tab and then select any combination of the following check boxes:
      - *Speak on each letter*
      - *Speak on each word*
      - *Speak on each sentence*

  - **Reading Text On Web Pages**
    - Click on the drop down list, and select *Web Highlighting*.
    - Hover your mouse over an area of text on a web page until it becomes highlighted. The system reads the highlighted text.

  - **Using The TextReader Window**
    - To display a text file in TextReader, click on the drop down list, and select the *Text File* option from the *Open in Text Reader* menu.
    - Browse to the location of the text file and then click on the **Open** button.
    - To display text from the clipboard in the **TextReader**, highlight the text in your document.
    - Right click on the highlighted text and select **Copy** from the pop-up menu.
    - Click on the drop down list, and select the *From Clipboard* option from the *Open in TextReader* menu.

CAST eReader

From http://www.cast.org/products/ereader

eReader is a program that provides many features including text-to-speech features for reading the text of a document and reading Web pages. It includes additional features such as reading text as you type and highlighting text as it reads aloud. It also provides capabilities to insert movie clips, sound files and graphics. The free version is available for download in the Windows environment. The manual is provided in both HTML (online) and PDF versions.

Features:

- Speaks digitized text, HTML, and DAISY 2.02 formatted digital talking books**
- Provides reading support for surfing the Internet
- Highlights text by word, sentence, or paragraph
- Opens two or more windows for easy referencing and note taking
- Provides flexible voice settings for speed and pitch
- Includes SAPI 4.0, and brand new SAPI 5.0, and ATT Natural VoicesTM
- Assists with writing through 'Type and Talk'
- Is available for Windows® and Macintosh® platforms

IntelliTools Bundle

From http://www.intellitools.com

The IntelliTools family of software and adapted keyboard provides an alternative to the standard keyboard and mouse. The combination of customized overlays created for use with the IntelliKeys keyboard and the IntelliTalk software provide a unique writing solution for users who have low literacy skills or physical access issues. By pressing a customized key on the IntelliKeys keyboard, the user can input an entire word or message as programmed by the teacher.

PixWriter

From http://www.slatersoftware.com/pixwriter.html

PixWriter from Slater Software is an easy to use word processor with text-to-speech, picture-to-text features and picture menus. Turn on the speak function, and the computer will speak each word as you type and provide pictures for many common words. Using the “easy-to-set-up” button feature, teachers can provide a grid of 8, 32 or 64 words or phrases that students can select to write their story. The program provides scanning access for switch users.

Features:

- User selects a button, the word and picture appear, and the computer speaks!
- Making Vocabulary Setups is Easy - Just Type!
- 16, 36, and 64 Button Setups.
- Choose Voices, Rates, and Pronunciations.
- Over 3000 Color Pictures and the Ability to Import Photos and other Clip Art.

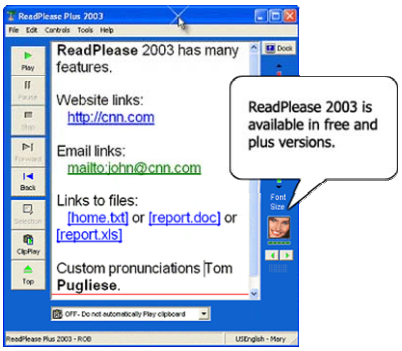
- Save and Print documents.
- Accessible - Use Adapted Keyboard, Mouse, Touch Window(R), and Single-Switch Scanning!
- Success for Beginning Writers!

ReadPlease and ReadPlease Plus 2003

From http://www.readplease.com/

Features:

- Microsoft voices: Mike, Mary, Sam
- Customize font and background color
- Reads text via Windows clipboard from any program (copy/paste)
- Control reading from system tray
- Reads e-mail emoticons such as :) or :(
- Adjustable voice speed (rate)
- Low vision color option



Plus version only features:

- Low vision large controls option
- Fast forward and backward
- Highlights text while reading
- Dock Mode - will dock at the top of the screen
- Add your own words and pronunciations
- Play can start anywhere in a document
- Adjustable pause between paragraphs
- Hot-key controls for all functions.

Text Aloud MP3

From http://www.textaloud.com/

TextAloud MP3 is the exciting new program that converts any text into spoken words and MP3 files. It resides in your Windows tray, always ready to read aloud your text from email, web pages, and documents. You can listen immediately, or save to .wav or MP3 files to hear later at your convenience. It's the world's most popular Text to Speech tool.

Features:

- Text-To-Speech
- Saves synthetic speech files as MP3 audio files (.wav)
- Can read text within the Text Aloud application or text copied into the Windows clipboard Highlights the spoken text word-by-word when copied into the Windows clipboard MP3 files can be downloaded into a portable MP3 player for portable access

Ace Buddy v3.00

From http://www.zero2000.com/ace-buddy/index.html

Ace Buddy is Text to speech software that has funny cartoon characters. Ace Buddy can read any text in any window: simply select the text you want to read and press Ctrl+C. It can also play plain text files. Ace Buddy has a familiar Winamp™ style user interface, so it's very easy to use. There are also dozens of voices, skins and characters available for your selection. More info-Zero2000 Software

textHELP!®
...for literacy, language and learning

Screen Reader v4

From http://www.texthelp.com/screenreader.asp?q1=products&q2=screenreader

Screen Reader v4 is part of the family of screen reader and writer programs available from textHELP!. Only the Screen Reader is available for free. The full program Read & Write with Wordsmith provides more features such as word prediction, speech while typing text, talking spell checker, scanned document support and more.

Features:

Reads selected text in documents, emails or Internet pages. Includes keyboard and mouse tracking. Highlights text as it is spoken to you from within a Text Reader window. Automatically reads screen menus and icons. Speech options allow you to adjust the voice to suit your needs. Uses optional friendly animated characters to speak text, Uses synthesized speech

Browsealoud

From http://www.browsealoud.com/

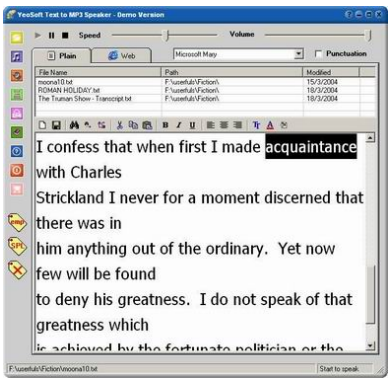
Browsealoud is a website speech enabling service which makes web content accessible to anyone with reading difficulties. It is designed to be simple for Users, requiring only a short download of the free program. Browsealoud not only speech enables website content, it also speech enables the menus and hyperlinks to ease navigation of the website. Simply by scrolling your mouse over the text that you want read to you, Browsealoud will speak what you require, helping you navigate websites more easily. Users have a choice of voice, pitch and speed, making navigation of websites easier and more meaningful than ever before for anyone with reading difficulties.

Yeosoft Text to MP3 Speaker

From http://www.text-mp3.com/

Yeosoft Text to MP3 Speaker is a full-functioned rich text editor and a speaker that can read aloud any e-text for you so as you can rest your eyes while reading books or anything else. The text to speech features voices as natural as a human in English, French and German. Moreover, you may also convert text to MP3, Ogg, or Wave file to enjoy later or make an audio book.

Features:



- Convert text to voice or MP3: full text or just selected parts, quickly and easily
- Support ID3 Tag for MP3 File (you may add such info as Author, Year, etc. into MP3)
- Speak any e-text aloud directly (3 basic voices with installation, you may add more voices later)
- Support XML tag for adding Emphasis Tone for selected words
- Support XML tag for adding Spell-out mark for selected words (word will be read letter by letter)
- Start to speak at any place where mouse cursor is
- Can change the text viewer's font and its size
- Can change the voice volume and speed when speaking
- Support punctuation

CoolSpeech 5.0

From http://www.bytecool.com/coolspch.htm

Brief Description:

CoolSpeech is the text-to-speech player for Windows! It empowers users to experience the wonderful text-to-speech technologies in many ways.

Features:

- Listen to online news from any URL you specified!
- Read your text files, rich-text files and HTML files aloud for you!
- Convert your text into spoken WAV files easily!
- Listen to your new messages from your email accounts!
- Listen to every word or sentence you've just typed!
- Listen to the text copied to the Clipboard immediately!
- Schedule files, URLs and emails to be read aloud!
- Tell the time and the date in different styles!
- Support almost all computer voices!
- Many more funny and useful features!

TextSound 2.0

From http://www.bytecool.com/textsnd.htm

Brief Description:

TextSound is the text-to-speech file converter. You can batch convert your text documents to spoken audio files using TextSound Windows Edition or TextSound Command-Line Edition. Check out **Why Convert Text to Audio?** TextSound 2.0 supports different output formats, including .wav and .mp3.

Features:

- Batch convert text files to audio files, there's no text size limit!
- An intuitive interface makes TextSound extremely easy to use!
- Multiple ways to add text files, such as Drag-and-Drop and more!
- Fast access to comprehensive properties for selected conversions!
- Conversion speed is configurable for your PC's best performance!
- Support different output audio formats! (.wav, .mp3, ...)
- The conversion list can be saved for later use!
- TextSound is compatible with almost all text-to-speech voices!
- Advanced users can perform conversions using a command line!

Key2Speak

From http://key2speak.com/

Key2Speak uses speech synthesis technology to read aloud what you type, as you type it. This can be helpful for numerous reasons, including checking the grammatical correctness of what you write, or simply to know what you typed without looking up from your keyboard.

The program **works with all Windows applications** including word processors, email clients, instant messengers and web browsers. The program operates on the fly, offering **immediate feedback as you are composing**.

Various settings allow you to configure the program to your own personal preferences. Several voices are included, with many more available to download free from the web site. The pitch, speed and volume of all voices can be defined.

The Settings panel also includes a set of delimiters that let you **specify exactly when text is read aloud**. For example, you can hear text word-by-word, sentence-by-sentence, or even paragraph-by-paragraph.

Along with reading text as you type, Key2Speak can also **read text from the clipboard**, allowing it to be used to read documents, web pages, emails and much more. Alternatively, should you require, Key2Speak can be set to read text as individual characters.

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